

WHAT IS CLAIMED IS:

1. A redundancy packet transmission router having an active packet transmission router and a standby packet transmission router each of which includes a function to realize a plurality of virtual routers, and an internal wiring conductor to connect said active router and said standby router, each of said active router and said standby router comprising:

a network interface accommodating communication channels;

a processor for making a predetermined process on a received packet;

a table memory for storing routing information necessary for the routing processing of said received packet; and

a program memory in which a program to be executed by said processor is previously stored, whereby when said routing information managed by a virtual router of 1 of said plurality of virtual routers realized on said active router is synchronized with said routing information to be managed by the corresponding one of the virtual routers realized on said standby router, said processor provided on said active router transmits to said standby router a packet including identification information of 1 that indicates said virtual router of 1, receives a response signal relative to said identification information from said corresponding virtual router of 1 realized on said

standby router, and transmits to said standby router said routing information that said virtual router of 1 of said active router manages.

2. A redundancy packet transmission router according to claim 1, wherein said processor provided on said active router transmits to said standby router said packet that includes said identification information indicating said virtual router of 1 and further an identifier indicating how said corresponding virtual router on said standby router processes.

3. A redundancy packet transmission router according to claim 1, wherein said standby router updates said routing information managed by said corresponding virtual router realized on said standby router on the basis of said routing information sent from said active router.

4. A redundancy packet transmission router according to claim 1, wherein said active router periodically transmits said packet including said identification information indicating said virtual router of 1 to said standby router.

5. A redundancy packet transmission router according to claim 4, wherein said standby router has a counter, and said standby router decides by said counter that when said standby router does not receive said packet including said identification information indicative of said virtual router of 1 for a predetermined time, said virtual router of 1 of said

active router has failed and then starts to take over the transfer processing that said virtual router of 1 on said active router has made.

6. A redundancy packet transmission router according to claim 1, wherein said packet including said identification information indicative of said virtual router of 1 is a VRRP packet.

7. A redundancy packet transmission router according to claim 6, wherein said identification information indicative of said virtual router of 1 is recorded in a VRID field of said VRRP packet.

8. A redundancy packet transmission router according to claim 2, wherein said packet including said identification information indicative of said virtual router of 1 is a VRRP packet.

9. A redundancy packet transmission router according to claim 8, wherein said identifier indicating how said corresponding virtual router processes is stored in a type field of said VRRP packet.

10. A redundancy packet transmission router according to claim 2, further comprising a configuration console that has a display screen and command input means, wherein said identifier indicating how said corresponding virtual router processes is determined on the basis of a command entered through said command input means.